

ABSTRACT OF THE DISCLOSURE

A method and apparatus are described for supporting the full MESI (Modified, Exclusive, Shared or Invalid) protocol in a distributed shared memory environment implementing a snoop based architecture. A requesting node submits a single read request to a snoop based architecture controller switch. The switch recognizes that a responding node other than the requesting node and the home node for the desired data has a copy of the data in an ambiguous state. The switch resolves this ambiguous state by snooping the remote node. After resolving the ambiguous state, the read request transaction is completed.